UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

MEMORANDUM

SUBJECT: Project Ceiling Increase Approval, Funding, and Exemption from the $2 Million Statutory Limit to Continue the Removal Action at Fruitland Magnesium Fire Incident, Maywood, Los Angeles County, CA

FROM: Jason Musante, On-Scene Coordinator
Emergency Response Section (SFD-9-2)

TO: Enrique Manzanilla, Director
Superfund Division

THROUGH: Harry Allen, Chief
Emergency Response Section (SFD-9-2)

I. PURPOSE

The purpose of this Action Memorandum is to request and document your approval of (1) a change in the scope of the Fruitland Magnesium Fire Site ("Site") project, and (2) an increase of the project ceiling from $1,620,000 to $3,960,000 in direct extramural costs to mitigate threats to human health and the environment posed by uncontrolled hazardous substances (namely arsenic, cadmium, chromium, copper, lead, mercury, selenium, silver and zinc) in ash, debris and soils associated with a fire-damaged industrial property located at 3570 Fruitland Avenue, Maywood, CA.

On June 16, 2016, the EPA On-Scene Coordinator (OSC) exercised delegated procurement authority to begin emergency stabilization and response actions. The United States Environmental Protection Agency ("EPA") approved the initial response action in the July 1, 2016 Request for a Time-Critical Removal Action at Fruitland Magnesium Fire Site (the "Action Memorandum"), included as Attachment C of this memorandum. The time-critical removal action is being taken pursuant to Section 104(a)(1) of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9604(a)(1), to mitigate threats to human health and the environment posed by the presence of heavy metals in residential properties in Maywood. The required exemption to spend more than $2 Million is justifiable under the criteria of 40 C.F.R. § 300.415(b)(5)(i), which allows for an exemption from the statutory limitation on response costs when: 1) there is an immediate risk to public

health or welfare or the environment; 2) continued response actions are immediately required to prevent, limit, or mitigate an emergency; and 3) such assistance will not otherwise be provided on a timely basis.

The actions proposed in this document will allow transition from on-going emergency removal and stabilization activities into necessary time-critical removal actions. As explained below, the additional funding requested in this memorandum is necessary for cleanup costs associated with the industrial property which is adjacent to the residential properties that were addressed during the initial emergency response/removal action.

II. SITE CONDITIONS AND BACKGROUND

Site Status: Non-NPL
Category of Removal: Time-Critical
CERCLIS ID: CAN000903494
SITE ID: A9AP

A. Site Description

1. Physical location

The Fruitland Magnesium Fire Incident (the "Site") is located at 3570 Fruitland Avenue, Maywood, Los Angeles County, CA (Latitude: 33.9961640/Longitude: -118.2011630). On the southern fence line of the Site is a residential neighborhood consisting of single family homes and apartment complexes. Light industry surrounds the Site in the other cardinal directions. See Figure 1 for a Site Location Map.

On June 14, 2016, at approximately 0200 hours, a fire started at the Panda International Trading Company (PIT). The fire at the PIT facility spread to the SOKOR Metals Company, both of which are located at 3570 Fruitland Ave. PIT collected and processed scrap metal and transported it out in bulk for recovery. SOKOR is a precious metals recovery operation that recovers precious metals from circuit boards and other electronics. Both facilities were heavily damaged in the fire.

Region 9 signed an Action Memo on July 1, 2016 to document the continuation of the response to the fire and in particular the removal residual ash from the street (Fruitland Ave and E 52nd Street, and segments of Everett and Maywood Avenues); assessment of the evacuated residential properties; decontamination of interior and exterior of impacted residential properties; removal of ash from impacted residential yards; and fencing, stabilization and mitigation measures at the PIT/SOKOR property. An Emergency Response Action Memorandum documents the initiation of the emergency removal action.

2. Site characteristics

As described above and outlined in the initial Action Memo, the initial scope of the Site included the exteriors and interiors of residential properties along E 52nd Street (both sides of the street). The initial Action Memo also included stabilization measures at the PIT and SOKOR Metals property. This amended action memo includes the industrial property of PIT and SOKOR Metals Company. The PIT and SOKOR Metals property is an industrial property which is located directly adjacent to residential properties. As shown in Figure 1, residential properties are located directly on the fence line of the industrial property. Sampling of ash, debris and soils at the industrial property has indicted the presence of hazardous materials in all of these media. While initial stabilization measures were implemented as an emergency measure, debris from the fire and PIT and SOKOR Metals operations remains on site. Residents continue to complain about the situation at this industrial property, and have concerns regarding the impact of the site to their health and welfare.

3. Removal site evaluation

On June 16, 2016, while the fire was burning, EPA dispatched the START contractor and directed the collection of air samples and ash profile samples. Relevant Contaminants of Concern (COCs) were detected in both media. On June 23, during the emergency response phase, START collected 3 ash samples, 4 debris samples, 2 powder samples and 4 soil samples on the industrial property. Due to the presence of piles of debris and issues with the structural stability of buildings on the site, sampling was limited. Selected results from the samples are provided in the following table:

Contaminant	Regional Screening Levels	Waste Thresholds	Ash (n=3)	Debris (n=4)	Powder (n=2)	Soil (n=4)
Arsenic	68 / 300 (adj. 10-4)	500	51.8 – ***2,570***	12.2 - ***842***	ND - **264**	4.15 – ***834***
Cadmium	71 / 980	100	***6,950 – 23,200***	*807* – ***37,500***	***1,360 – 34,400***	*136* – ***1,210***
Chromium	120,000 / 180,000	500	2.06 - 457	1.87 – 71.7	ND – 15.5	291 – *87,300*
Copper	3,100 / 47,000	2,500	ND – *31,700*	ND – 35.6	ND – 1.17	0.239 – 1,100
Lead	400 / 800	1000	***13,400 – 189,000***	ND – ***86,100***	0.142 – ***1,300***	ND – 63.1
Mercury	11 / 46	20	ND – ***943***	0.123 – ***329***	6.35 – ***2,170***	ND – ***2,020***

In summary, these preliminary samples indicate exceedances of hazardous waste thresholds for selected COCs in ash, debris and powder grab samples. One exception is chromium which exceeds hazardous waste thresholds only in soil. Arsenic, cadmium and mercury exceed industrial use risk-based Regional Screening Levels in soil samples. Arsenic, cadmium, lead and mercury also exceed risk based thresholds in ash, debris and powder. One result in soil also contained a concentration of 640 mg/kg of one PCB congener (Aroclor-1242). These results, while incomplete, document the presence of hazardous substances above waste and/or risk thresholds. They also suggest that the soil likely has additional contamination that will require further characterization.

In addition to this sampling event, EPA and START conducted subsequent visits to the Site to plan removal activities. During the September 2, 2016, visit the team estimated quantities of contaminated debris, scrap metal and soil for removal. During this visit, the team documented ash, debris, drums and totes, electronic waste, universal waste, and batteries.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

EPA's removal assessment documented the presence of hazardous substances including arsenic, mercury and heavy metals (cadmium, chromium, copper, & lead) in ash, debris, powders and soils on Site. Laboratory analytical data

has confirmed the presence of California hazardous waste for the toxicity characteristic. In addition there may be some PCB contamination in Site soils. Such hazardous wastes are "hazardous substances" as defined by Section 101(14) of CERCLA.

5. National Priorities List ("NPL") status

The Site is not currently on or proposed for inclusion on the NPL.

B. Other Actions to Date

On June 16, 2016, LA County Fire Health Hazmat requested EPA's assistance in mitigation of the hazardous substances on-site. EPA's actions were performed consistent with the initial Action Memo. EPA participated in the emergency response action along with LA County Fire Heath Hazmat Management Division (HHMD) and LA County Department of Public Health (DPH) in a Unified Command (UC). Actions included evaluation and cleanup of the residential properties along E 52nd Street and stabilization of the industrial property as discussed above.

C. State and Local Authorities' Roles

1. State and local actions to date

LA County Fire HHMD and LA County DPH participated in the UC for the Incident. The Site remains under a UC structure currently with representation from County Public Health, Health Hazmat and EPA. In earlier operational periods, CA Department of Toxic Substances Control (DTSC) was on site to coordinate on the emergency response and conduct an investigation along with HHMD. DTSC arranged for disposal of contaminated firefighting and rinse water. LA County Office of Emergency Services (OES) provided relocation support, along with support from a number of other county agencies.

2. Potential for Continued State/Local Response

While support for relocation and residential personal property damage has been provided by county agencies, neither State nor local agencies have presented the resources to undertake the required waste removal at the industrial property at this time. Representatives from State and local response organizations will continue to assist and coordinate with EPA in various tasks including data review, planning and community relations.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Conditions at the Site exist which may pose an imminent and substantial endangerment to public health, and/or welfare, or the environment based on

the factors set forth in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. § 300.415(b)(2). These factors include:

1. **Actual or potential exposure to nearby populations, animals or the food chain from hazardous substances or pollutants or contaminants**

There is an actual or potential exposure to nearby populations from hazardous substances at the Site. Ash, debris, powder and soils containing arsenic, mercury, PCBs and heavy metals, have been identified on the now vacant property. The property is bordered on one side by a residential area. This is the area impacted by ash during the fire event. Ash throughout the burn area also has not been fully stabilized or mitigated. Any person entering the fire damaged areas may be exposed to hazardous substances by direct contact with contaminated ash and debris. Nearby populations may be exposed to hazardous substances via direct contact and inhalation

Arsenic, cadmium, lead, and mercury are present above health thresholds in contaminated media at the Site. Arsenic, cadmium and mercury exceed industrial use risk-based Regional Screening Levels in soil samples. Other hazardous substances or pollutants and contaminants not discovered to date or not specifically identified herein may exist at the Site. These substances may also pose a threat to human health and the environment.

Arsenic is toxic and is commonly used as a poison to control pests. Exposure can occur via airborne dust, drinking water, incidental ingestion of soil, and direct contact with contaminated soils. Arsenic affects the skin, the respiratory system, the kidneys, the liver, the central nervous system, the gastro-intestinal tract and the reproductive system, and is a possible teratogen.

The EPA has determined that inorganic arsenic is a known human carcinogen. Exposure for shorter periods of up to a year can result in several non-cancer adverse health effects. Low levels of arsenic can cause nausea and vomiting, decreased production of red and white blood cells, abnormal heart rhythm, and damage to blood vessels. At high levels, inorganic arsenic can cause death.

Cadmium is a highly toxic heavy metal, especially by inhalation of dust or fume. Cadmium is a potential occupational carcinogen that targets the respiratory system, kidneys and blood. Cadmium poisoning can result in pulmonary edema, dyspnea (breathing difficulty), emphysema, anemia, nausea and vomiting. Cadmium is also flammable in powder form.

Lead is a heavy metal that bio-accumulates in human tissues. Short-term exposure to large amounts of lead can cause harmful effects on the nervous system, gastrointestinal system, kidneys, and circulatory system. Long-term exposure to low levels, such as those that occur in the work place, can cause damage to the central nervous system, kidneys, blood, gastrointestinal tract, and gingival tissues. Children are particularly sensitive to the chronic effects of lead, with slowed cognitive development, reduced growth and other effects.

Lead exposure may result in loss of appetite, anemia, malaise, insomnia, headache, irritability, muscle and joint pains, tremors, hallucinations and distorted perceptions, muscle weakness, gastritis, and liver changes. The major organ systems affected are the nervous system, blood systems, and the kidneys. Low levels of lead impair neurotransmission and immune system functions and may increase systolic blood pressure. The effects of lead are the same whether it enters the body through breathing or

swallowing. The main target for lead toxicity is the nervous system, both in adults and children. Long-term exposure of adults to lead at work has resulted in decreased performance in some tests that measure functions of the nervous system. EPA has determined that lead is a probable human carcinogen.

Mercury is a natural occurring heavy metal which has several forms. The nervous system is very sensitive to all forms of mercury. Methylmercury and metallic mercury vapors are more harmful than other forms, because more mercury in these forms reaches the brain. Exposure to high levels of metallic, inorganic, or organic mercury can permanently damage the brain, kidneys, and developing fetus. Effects on brain functioning may result in irritability, shyness, tremors, changes in vision or hearing, and memory problems. Short-term exposure to high levels of metallic mercury vapors may cause effects including lung damage, nausea, vomiting, diarrhea, increases in blood pressure or heart rate, skin rashes, and eye irritation.

2. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate

Sampling results have documented the presence of heavy metals in ash, debris and soils on the Site. See Section A3. for a description of the hazardous substances present and their respective concentrations.

3. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released

Rain and/or winds may result in the off-site migration of contaminated soil and ash into surrounding residential properties, the street, storm sewers and the larger watershed.

4. Availability of other appropriate federal or state response mechanisms to respond to the release

LA County and CA DTSC have requested EPA assistance due to the size and scope of the impacted area, and their inability to conduct a response action at the Site at this time. EPA has been coordinating with the State of California on their ability to perform duties consistent with their authorities and resources.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances, pollutants, and contaminants from this Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

EPA proposes to characterize and remove hazardous substances at the Site and nearby residences to ensure residences are safe for re-occupancy and that further off- site migration of ash is minimized. Much of the on-site waste consists of ash fall-out from the fire and explosions. All wastes will be characterized using EPA-approved methodologies and delivered to an approved waste receiving facility. Analytical data obtained during the removal site evaluation is expected to be sufficient for the final profiling and acceptance of the waste at a permitted off-site facility; however, additional analytical data may be generated depending on facility-specific profile requirements.

The emergency phase of the removal action was focused on ensuring nearby residences were safe for re-occupancy and that further off-site migration of ash was minimized. As discussed above, contaminants which pose a threat still remain on the Site proper. EPA proposes to segregate solid wastes/debris, contaminated debris, and contaminated ash/soils at the Site for proper transportation for disposal. It is anticipated that additional hazardous materials, wastes, or situations may be present and contingency costs have been built into the funding ceiling for this eventuality. Analytical data obtained during the proposed removal will be used for extent of contamination determinations and waste characterization/profiling for acceptance at RCRA permitted off-Site facilities. Air monitoring and sampling will be performed in accordance with OSHA requirements during all phases of the removal action, especially when there is a potential for airborne releases of toxic air contaminants. Operational controls such as dust containment and/or suppression will be used to abate fugitive dust emissions.

All activities will be performed in conformance with prescribed health and safety procedures. Sampling and analysis activities will conform to EPA approved methodologies and mandatory specifications for quality assurance and quality control. This removal will comply with the Off-Site Rule, 40 C.F.R. § 300.440.

All activities will be performed in conformance with prescribed health and safety procedures. Sampling and analysis activities will conform to EPA-approved methodologies and mandatory specifications for quality assurance and quality control. There are no identified areas of leaks or spillage. Any such areas that may be identified during the removal action will be addressed.

2. Contribution to remedial performance

EPA does not anticipate a long term remedial action at this Site. This removal action should remove all immediate threats posed by uncontrolled hazardous substances at the Site.

The long-term cleanup plan for the Site:

Final reporting of this removal action will be provided to Los Angeles Fire HHMD for consideration in any further activities under state or county programs.

Threats that will require attention prior to the start of a long-term cleanup:

The immediate threats that have been identified in the Action Memorandum will be addressed by the proposed removal action.

The extent to which the removal will ensure that threats are adequately abated:

The removal of abandoned and above ground hazardous substances is expected to abate the immediate threats from the Site.

Consistency with the long-term remedy:

As stated above, removal activities undertaken in this action will be considered and incorporated into state and county facility closure proceedings.

Post Removal Site Control:

The elimination of all threats identified for this removal action is expected to eliminate the need for post-removal Site control.

3. Applicable or relevant and appropriate requirements ("ARARs")

Section 300.415(j) of the NCP provides that removal actions must attain ARARs to the extent practicable, considering the exigencies of the situation.

Section 300.5 of the NCP defines applicable requirements as cleanup standards, standards of control, and other substantive environmental protection requirements, criteria or limitations promulgated under federal environmental or state environmental or facility siting laws that specifically address a hazardous substance, pollutant, contaminant, remedial action, location or other circumstances at a CERCLA site.

Section 300.5 of the NCP defines relevant and appropriate requirements as cleanup standards, standards of control and other substantive requirements, criteria, or limitations promulgated under federal environmental or state environmental or facility siting laws that, while not "applicable" to a hazardous substance, pollutant, or contaminant, remedial action, location, or other circumstances at a CERCLA site, address problems or situations sufficiently similar to those encountered at the CERCLA site and are well-suited to the particular Site.

Because CERCLA on-site response actions do not require permitting, only substantive requirements are considered as possible ARARs. Administrative requirements such as approval of, or consultation with administrative bodies, issuance of permits, documentation, reporting, record keeping and enforcement are not ARARs for the CERCLA response actions confined to the Site.

The following ARARs have been identified for the proposed response action. All can be attained.

Federal ARARs: Potential federal ARARs are the RCRA Land Disposal Restrictions, 40 C.F.R. Part 268, Subpart D; the CERCLA Off-Site Disposal Restrictions, and the U.S. Department of Transportation of Hazardous Materials Regulations, 49 C.F.R. Part 171, 172 and 173.

State ARARs: Potential state ARARs are Characteristics of Hazardous Waste implemented through the California Health and Safety Code, Title 22, § 66261.20, § 66261.21, § 66261.22, § 66261.23, § 66261.24.

4. Project schedule

The removal action began as an emergency under the OSC Wise's delegated procurement authority. The residential phase of the response action was conducted from June 16, 2016 to July 11, 2016. The next phase of work is scheduled to begin in the fall of 2016 and proceed for approximately 6 weeks.

B. Estimated Costs with Ceiling Increase

	Original Cost	Additional Costs	Total Costs
Extramural Costs from the Regional Allowance			
Cleanup Contractor	700,000	1,200,000	1,900,000
Extramural Costs not from the Regional Allowance			
START	500,000	600,000	900,000
Pacific Strike Team/SERAS	150,000	150,000	300,000
20% Contingency	270,000	390,000	950,000
Total Extramural Removal Ceiling	$1,620,000	$2,340,000	$3,960,000

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Given the Site conditions, the nature of the hazardous substances documented on-site and the potential exposure pathways to nearby populations described in Sections II, III and IV above, actual or threatened releases of hazardous substances from the Site, if not addressed by implementing the response actions selected in this Action Memorandum, present an imminent and substantial endangerment to public health, or welfare, or the environment.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues with the Site identified at this time.

VIII. ENFORCEMENT

Please see the attached Confidential Enforcement Addendum for a discussion regarding potentially liable parties and enforcement. In addition to the extramural costs estimated for the proposed action, a cost recovery enforcement action also may recover the following intramural costs:

Intramural Costs	Original Cost	Additional Costs	Total Costs
U.S. EPA Direct Costs[1]	60,000	100,000	160,000
U.S. EPA Indirect Costs (56.51% of $3,960,000 +160,000)	949,368	1,322,334	2,271,702
Total Intramural Cost	$1,009,368	$1,422,334	$2,431,702

The total EPA extramural and intramural costs for this removal action that will be eligible for cost recovery, based on full-cost accounting practices, are estimated to be $6,391,702. Of this, an estimated $3,960,000 comes from the Regional removal allowance.

IX. RECOMMENDATION

This decision document would commit additional funding to complete the response determined necessary for the Fruitland Magnesium Fire Site, Los Angeles

[1] Direct costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of Site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual costs from this estimate will affect the United States' right to cost recovery.

County, California, as developed in accordance with CERCLA and not inconsistent with the NCP. This decision is based on the Administrative Record for the Site.

Because conditions at the Site meet the NCP criteria for a time-critical removal, I recommend that you concur on the determination of imminent and substantial endangerment and the removal action proposed in this Action Memorandum. The total removal action project ceiling if approved will be $6,391,702 of which $3,960,000 comes from the Regional removal allowance. The requested additional extramural funding is $3,960,000 from the Regional removal allowance. You may indicate your decision by signing below.

Approved: _____

Enrique Manzanilla Date
Director, Superfund Division

Disapprove: _____

Enrique Manzanilla Date
Director, Superfund Division

Enforcement Addendum

Attachment A: Index to the Administrative Record
Attachment B: Selected Data Tables
Attachment C: Request for a Time Critical Removal Action the Fruitland Magnesium Fire Site, June 2016

cc: Jean Schuman, USEPA, OEM, HQ

bcc: Site File
Michelle Rogow, SFD-9-2
Craig Whitenack, CI
Madeline Gallo, ORC
Rebekah Reynolds, ORC
Celeste Temple, SFD-9-4

Confidential Enforcement Addendum

Attachment A: Index to the Administrative Record

1. Ash and Soil Sampling Analytical Results, June, 2016 Fruitland Magnesium Incident
2. Air Sampling Analytical Results, outdoor air sample data June 2016, Fruitland Magnesium Incident
3. ATSDR ToxFAQ for Chromium. CAS#:7440-47-3. September 2008.
4. ATSDR ToxFAQ for Copper. CAS#:7440-50-8. Mach 2011.
5. ATSDR ToxFAQ for Zinc. CAS#:7440-66-6 . March 2011 .

Attachment B: Selected Data Tables

Attachment C: Request for a Time Critical Removal Action the Fruitland Magnesium Fire Site, July 1, 2016